

PRECAST, PRESTRESSED CONCRETE DECK BEAMS STAGE CONSTRUCTION

Effective: September 1, 1994

Revised: January 1, 2002

Precast prestressed concrete deck beams shall be erected according to the requirements of Article 504.06(e) of the Standard Specifications except that shear key clamping between Stage I and Stage II construction will be required as shown on the plans and as herein specified.

After the deck beams for Stage I construction are erected and grouted, expansion dams are placed and the wearing surface installed, the traffic shall be diverted to them. The deck beams for Stage II construction shall then be erected and all keyways grouted, except the keyway along the Stage construction line.

The Contractor shall furnish all material for the clamping devices, including sufficient 1mm (1/16 in.) and 3mm (1/8 in.) steel shims to adjust for differential elevations between the two deck beams.

The 30mm (1 1/4 in.) holes for the clamping devices shall be drilled at the locations shown on the plans. Care shall be taken to drill the holes perpendicular to the beams. The clamping devices shall be installed and pulled up tight so that a full, firm bearing is obtained between the clamping plates and the deck beam concrete.

After the shear key clamping devices are fully secured, the Stage construction line key will be grouted. The clamping devices shall not be loosened or removed until the grout has fully cured as specified.

After the clamping devices are removed the drilled holes and unfilled area of adjacent key shall be flushed out with water. The drilled hole and unfilled adjacent areas shall then be filled with grout to the bottom of the keyways.

After the work is finished the clamping devices and shims shall remain the property of the Contractor for future use.

Complete the wearing surface installation and the remainder of Stage II construction.

This work, including the furnishing of clamping devices and shims, will not be paid for separately but shall be included in the unit price bid per square meter (square foot) for PRECAST, PRESTRESSED CONCRETE DECK BEAMS of the depth specified.